

REMARKS

The Office Action Summary indicates, "The drawing(s) filed on 22 October 2003 are accepted." The attached drawings were filed with the United States Patent and Trademark Office on February 5, 2004 in response to the Notice to File Corrected Application Papers mailed January 28, 2004 as evidenced by a copy of the attached postcard.

By this amendment, the specification has been amended to reflect the serial numbers of related cases as suggested by the Examiner.

Claims 1, 5, 13, and 17-19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Codama (US 6,091,196). Claims 2-4, 6-8, and 20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Codama (US 6,091,196), and further in view of Toguchi et al. (US 6,753,097).

By this amendment, claim 13 is amended to clarify element d) as requested by the Examiner. Also, by this amendment, independent claims 1, 5, and 13 have been amended to specify that the stabilizing substituted perylene material is disposed in at least one of the light-emitting layers and has a concentration selected so that it does not emit light to thereby increase the lifetime of the white-light-emitting OLED device. Perylenes are generally known to be light-emitting materials; however, in accordance with the invention, the level of the substituted perylene is selected so that it does not emit light. It has been discovered that the substituted perylene that does not emit light acts as a stabilizing material and provides improved performance in the way of lifetime of the OLED device. This feature was not known or suggested by any of the art cited by the Examiner. As the Examiner points out, Codama teaches a fluorescent material which can be a perylene derivative (see column 11, line 64-column 12, line 11). There is no recognition in Codama of the present invention now set forth in all the independent claims. Codama uses perylene as a blue light-emitting material. The Examiner states that Codama is deemed to teach fluorescent materials in his light-emitting layer within the range disclosed by Applicants. In column 16, lines 38-41, Codama is discussing the use of rubrene as a yellow emissive material. Within this range, rubrene will emit yellow light. There is nothing in this teaching that relates to a substituted perylene or to a stabilizing material having a concentration selected so that it does not emit light. Since

Codama only discusses blue and yellow emissive materials which produce blue and yellow light, respectively, Applicants fail to see any relevance to this reference to the now amended independent claims.

Toguchi et al. do teach the well known fact that perylenes can be used in a light-emitting layer, but there is nothing in Toguchi et al. which discloses the use of non-emitting stabilizing perylene material in a light-emitting layer.

Applicants fail to see how Toguchi et al. can even be combined with Codama to disclose, suggest, or motivate anyone to the present invention to use a non-luminescent stabilizing substituted perylene as set forth in the claims in this case. Accordingly, it is believed that all the independent claims in this case contain unobvious subject matter. Applicants note that claims 9-12 and 14-16 were indicated to be allowable if combined with their corresponding independent claims. However, in view of the fact that Applicants believe that all of the independent claims contain unobvious subject matter, these claims need not be incorporated in their corresponding base claim. The remaining claims each depend upon one of the independent claims and should be allowed along with their independent claim.

It is believed that these changes now make the claims clear and definite and, if there are any problems with these changes, Applicants' attorney would appreciate a telephone call.

In view of the foregoing, it is believed none of the references, taken singly or in combination, disclose the claimed invention. Accordingly, this application is believed to be in condition for allowance, the notice of which is respectfully requested.

Respectfully submitted,



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Enclosures

If the Examiner is unable to reach Applicant's Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.